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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,167	01/26/2004	Kenji Tochigi	2004-0080A	6714

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EXAMINER

NGUYEN, PHONG H

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/763,167	Applicant(s) TOCHIGI ET AL.	
	Examiner Phong H Nguyen	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: ____ |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. The Specification is objected to under 37 CFR 1.71 because it does not describe a driving mechanism that drives the position determining unit and the cutting unit to approach the bottom portion of the fin material.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1, 2 and 3, it is unclear how the positioning determining unit and the cutting unit approach the bottom portion of the fin material.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding line 9, the phrase "cutting blades that moves" is confusing. It is unclear whether Applicant is claiming one cutting blade or a plurality of cutting blades. It is assumed that there is only one cutting blade.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama (4,523,500).

Regarding claim 1, Maruyama teaches a corrugated fin cutting device comprising:

a position restraining unit 102 that restrains a position of a bottom portion of a corrugated fin material that is being continuously conveyed in a conveying direction;

a position determining unit 105 that approaches the bottom portion of the fin material to determine a position and moves in the conveying direction in synchronization with the fin material that is being conveyed; and

a cutting unit 113 that moves with the position determining unit in the conveying direction and cuts the bottom portion of the fin material at the position determined by said position determining unit.

See Figs. 1-6.

Regarding claims 3 and 4, Maruyama teaches a method of cutting corrugated fin comprising the steps of:

a position restraining step of restraining by a position restraining unit 102 a position of a bottom portion of a corrugated fin material that is being continuously conveyed in a conveying direction;

a position determining step of determining a position of the bottom portion of the restrained fin material by a guide piece 105 approaching the bottom portion, and then moving the guide piece in synchronizing with the fin material in the conveying direction; and

a cutting step of moving cutting unit (103, 111) with the position determining unit in the conveying direction, and cutting by the cutting unit the bottom portion of the fin material at the position determined by the guide piece.

See Figs. 1-6.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (4,523,500) in view of Japanese patent 5-23912, hereinafter patent '912.

Maruyama teaches a corrugated fin cutting device comprising:

a worm 101 that engages corrugated fin material and continuously conveys the fin material in a conveying direction;

a guide piece 105 that approaches the bottom portion of the fin material that is being engaged with the worm to determine a position and moves in the conveying direction in synchronization with the fin material that is being conveyed; and

cutting blade 103 that moves to the determined bottom portion of the fin material in the conveying direction of the fin material and cut the bottom portion of the fin material that is being guided by the guide piece when the guide piece passes the both worms.

See Figs. 1-6.

Maruyama fails to teach a pair of worms engaging with both shoulders of the fin material. Patent '912 teaches a pair of worms engaging with both shoulders of a fin material. Therefore, it would have been obvious to provide a pair of worms engaging with both shoulders of the fin material as taught by patent '912 as an alternative design of Maruyama's one worm to advance fin material with wide width.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wallis (4,507,948) and Wallis (5,138,861) teach corrugated fin cutting devices of general interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phong H Nguyen whose telephone number is 571-272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PN: *pn*
January 31, 2005



Allan N. Shoap
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Group 3700